N.C.A.R.C.
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North Coast
Amateur Radio Club
P.O. Box 30529
Cleveland, OH 44130

NORTH COAST COMMUNICATOR

SEPTEMBER/OCTOBER 1985

President: Rick Wells, K8SCI 779-8999 Vice-President: Bob Mills, K8TTZ 431-9492
Treasurer: Glenn Christman, WD8OMW 661-3656 Secretary: Steve Wolf, WB8IKO 777-1177
Trustees: Rol Randolph K8ATQ, Pete Harmon W1BKZ, Tom Kopcak N8ETP, Pauline Wells KA8FOE,
Dick Dell WD8ISB, Dave Curry KB8TT, Shirley Lantz KA8Y, Dirk Gastaldo KD8ZI, Ed Zorn KD8ZK.

NORTH COAST BOARD MEETING: WEDNESDAY, SEPTEMBER 25TH, 7:00 P.M. AT GLENN'S (WD8OMW) QTH.

NORTH COAST GENERAL MEETING: THURSDAY, OCTOBER 3RD, 7:00 P.M. (1/2 HOUR EARLIER) AT THE NORTH OLMSTED BRANCH OF THE CUYAHOGA COUNTY PUBLIC LIBRARY, 27425 BUTTERNUT RIDGE, (SEE ENCLOSED MAP).

TWO MEETINGS WILL BE HELD THAT EVENING IN ORDER TO DISCUSS AND VOTE ON ADOPTING THE PROPOSED NEW BY-LAWS OUR CURRENT BY-LAWS REQUIRE A READING OF THE PROPOSED CHANGE/S AT A PRIOR MEETING TO THE ACTUAL MOTION TO VOTE AND ACCEPT. A TELEPHONE POLL OF NORTH COAST TRUSTEES/OFFICERS LED TO THE DESCISION OF HAVING TWO MEETINGS ON OCTOBER 3 IN ORDER TO GET THE BY-LAW ISSUE OVER AND DONE WITH. THESE BY-LAW CHANGES ARE NECESSARY IN ORDER TO CONTINUE WITH THE NOT-FOR-PROFIT INCORPORATED STATUS IN THE STATE OF OHIO, AS WELL AS, THE "TAX EXEMPT" STATUS WITH THE INTERNAL REVENUE SERVICE.

*** COFFEE, DONUTS, 50/50 RAFFLE, DOOR PRISES, EYEBALL QSO'S, EVERYONE IS WELCOME, SEE YOU THERE ***

CLEVELAND HAMFEST BANQUET SATURDAY, SEPT 21, HARLEY HOTEL, I-71 AT BAGLEY RD, MIDDLEBURG HTS., OHIO

COCKTAILS AT 6 PM, BUFFET DINNER AT 7 PM, PRIZES, MASTER OF CEREMONIES: TED ALEXANDER (K8VPL)
GUEST SPEAKER: DICK FEAGLER (WKYC TV-3)

COST IS $19.00 PER PERSON, FOR RESERVATION CONTACT BARB ERNEST (N8DAD) AT 941-2271, OR
RICK WELLS (K8SCI) AT 779-8999.

CLEVELAND HAMFEST AND COMPUTER SHOW SUNDAY, SEPT 22, CUYAHOGA COUNTY FAIR GROUNDS, BEREA, OHIO..

ADVANCED TICKETS AVAILABLE THROUGH NORTH COAST ($3.00). COST AT THE GATE IS $3.50. NORTH COAST BENEFITS FROM EACH ADVANCE TICKET IT SELLS ($.50 PER TICKET). IF YOU DO NOT HAVE AN ADVANCED TICKET YET, CONTACT: RICK WELLS (K8SCI) AT 779-8999.

SEE YOU ALL AT THIS YEARS CLEVELAND HAMFEST - FLYER ENCLOSED...

PRESIDENTS MESSAGE

I WOULD LIKE TO EXPRESS MY THOUGHTS CONCERNING THE DOUBLE MEETING ON OCTOBER 3RD. THERE IS ABSOLUTELY NO REASON WHY THIS CANNOT OCCUR. PRIOR ANNOUCEMENT HAS BEEN MADE WITH THIS ISSUE OF THE COMMUNICATOR, AND THIS WILL ALSO BE ANNOUCED ON ALL OF THE NORTH COAST SUNDAY NIGHT INFORMAL NETS PRIOR TO THE MEETING. OUR MEETINGS (UNFORTUNATELY) HAVE RECENTLY BEEN SPENT WITH MUCH TIME ON THE BY-LAWS AND E.A.P. DISCUSSIONS, AND LESS ON NORMAL AMATEUR RADIO CLUB ACTIVITIES/PROGRAMS. NO ONE SEEMS TO LIKE TO SPEND MUCH TIME REGARDING THESE BY-LAW CHANGES. HOWEVER, THEY ARE A NECESSARY EVIL. UNLESS YOU HAVE ANY SERIOUS OBJECTIONS TO THE ENCLOSED BY-LAWS (WHICH HAS RECEIVED BOARD/TRUSTEE APPROVAL FOR POSITIVE RECOMMENDATION TO THE MEMBERSHIP) I URGE YOU TO VOTE IN FAVOR OF THESE TWO MEETINGS IN ORDER THAT WE MAY PROCEED FORWARD TO MORE AMATEUR RADIO ACTIVITIES AT MEETINGS IN THE FUTURE.

RICK WELLS, K8SCI

NORTH COAST AMATEUR RADIO CLUB - JULY 28, 1985 BOARD MEETING

The meeting was called to order by Rick, K8SCI at 1610 hours. Present were Rick, K8SCI; Dave, KB8TT; Dick, WD8ISB; Glenn, WD8OMW; Steve, WB8IKO; Tom, N8ETP; Dirk, KD8ZI and Bob, K8TTZ.

Costs for the "Communicator" will be substancially reduced by the future printing of the newsletter at Cleveland Twist Drill. Through Tim, KA8VIC, the cost will be reduced from about $0.0387 per side to $0.01 per side. An agreement was reached where the Club will pay Cleveland Twist Drill their costs and they will donate the availability of the service.

Tickets will be sold for the upcoming Cleveland Hamfest. The Club will realize $0.50 per ticket.

The tape of North Coast 1985 Field Day made by KD8ZI was reviewed.

The subject matter for the August 1, 1985 general meeting was discussed.

On the incentive of KB8TT, a HF net will begin on Wendsday, July 31, 1985 on 75 meters. It is hoped that this will give HF-only hams a chance to participate in the Club.

WD8OMW reports that the financial situation of the Club looks good. A fundraising function for the Cleveland Hamfest was discussed and the best idea seems to be a 50-50 raffle.

KD8ZI brought up the subject of looking into not-for-profit status for the Club. He will take the initiative to look into this.

KD8ZI raised the question of becoming more involved with the Volunteer Examiner program. Perhaps the Club could sponsor tests in Cuyahoga County.

ARRL affiliation was discussed. This led to the suggestion that a membership chairperson may make the job of keeping track of the various membership information easier. This is to be brought up at the regular meeting in the hopes of finding a volunteer.

The input of information to the "Comminicator" was discussed.

An overview of what will be presented about the EAP was presented.

Improper use of the autopatch led to a disussion of rulemaking for such functins. The problem of what rules to make, where to stop making them and what rules are detremental to the activities of the Club led to dropping of the subject.

The meeting adjourned at 1830 hours.

Steve, WB8IKO - Secretary

MINUTES -- AUGUST 1, 1985 REGULAR MEETING

The meeting was called to order at 1939 hours by President Rick, K8SCI.

The Treasurer's report was given and accepted. The roll was called. The minutes from the last meeting were accepted as published in the "Communicator".

Field Day expenses and donations were discussed.

Dirk, KD8ZI, discussed the possibility of obtaining not-for-profit status for the club. There are a number of ways to do this and questions were raised as to the applicability to the Club's needs. A motion was made to refer this question to a By-Laws/Not-For-Profit Committee to be chaired by Dirk.

Tim, KA8VIC, presented an overview of the discussions and suggestions of the EAP Committee. The Committee recommended that the Club proceed with the writing of a "Disaster Communications Plan Utilizing Amateur Radio". Discussion followed this presentation and some members expressed concern over the Club's involvment. On the motion of Steve, WB8IKO, the Committee's recommendation was adopted.

Dirk, KD8ZI, related that discussions of the need for a Membership Chairperson was held at the last Board Meeting. It was hoped that someone from the Club would be willing to take this function. The subject will be brought up again at the next meeting.

Two videotapes were shown. One dealt with the Field Day weekend and the Club's activities. A second tape dealt with fox-hunting. This tape was made by LCARA and brought by Ron, N8FCX.

The meeting was adjourned at 2230 hours.

Steve, WB8IKO - Secretary

Minutes of Board of Trustees Meeting of the North Coast Amateur Radio Club, 18 August 1985

The meeting was called to order by Rick Wells. The roll was as follows: KD8ZI-Dirk, KD8ZK-Ed, WD8OMW-Glenn, N8ETP-Tom, KB8TT-Dave, K8ATQ-Rol, KA8Y-Shirley, K8SCI-Rick, WD8ISB-Dick. N8ETY-Dave observing.

After forming an agenda, the meeting continued. A motion was made by Dirk to create a budget form in order to keep better track of club funds. M/S/P

Shirley, KA8Y, was chosen as the club's person to honor at the Cleveland Hamfest banquet beacuse of her work with Feild Day, Fox Hunts, the V.E. program, and other club activities. A motion was made by Rick to have the club pay for two banquet tickets for Shirley as the honored guest. M/S/P (with Dirk and Tom abstaining).

Dirk made a motion that the club obtain $500,000.00 General Liability Insurance. M/S/P

Dirk presented the board with the articles of incorporation, as well as a copy of the proposed bylaws for the club. After much discussion, Dirk made a motion that the board reccomend to thi general membership at the next meeting, that the club pursue incoporating non-profit in the state of Ohio. M/S/P
Also, reccomend that the club pursue tax-exempt status with the IRS under section 501.C3. M/S/P

The issue of repeater ownership was raised, and a committee consisting of Dick, Shirley, Rick and Dirk was formed to look into the possibility of the club purchasing the repeater from Rick.

Dirk made a motion that the proposed bylaws be printed in the next club newsletter form general membership information. M/S/P

The 50/50 drawing discussion was tabled until a suitable legal-type person could be consulted as to its legality.

Next Trustee meeting to be Wed. September 25th at 1900 hrs. at WD8OMW's place.

Motion to adjourn was passed before it was made.

Glenn J. Christman acting secratary

***** FOR SALE *****

KENWOOD TR-2400 HT with many accs. - $150.00
HY-GAIN 18AVT/WBS 5 band vertical - $80.00

Steve, WB8IKO, 777-1177

MEMBERSHIP CHAIRPERSON

Many times throughout the year questions come up as to what members have what equipment or belong to what group. Examples are: -- Do we have enough ARRL members to become affilitated? -- Do we have any member with SSTV equipment for a possible SAREX uplink? -- How many Extra Class licenses do we have for possible use as VEs in a Club examination program? All of these questions have recently come up and answers were difficult to come by.

A Membership Chairperson responsible for maintaining a database with such information would be very valuable in these times. Ideas and comments would be appreciated. A volunteer would be an important asset to the Club.

Steve, WB8IKO

AMATEUR RADIO CODE AND THEORY CLASSES

THE NEXT NOVICE THRU EXTRA CLASSES THAT WILL BE SCHEDULED AT VALLEY FORGE HIGH SCHOOL, PARMA HEIGHTS, OHIO WILL START TUESDAY EVENING SEPTEMBER 24TH AT 7:00 P.M.. THESE CLASSES WILL RUN FOR 12 WEEKS. FOR MORE INFORMATION, CONTACT: FRED ENGELMAN, WB8UBS AT 524-1995.

A SPECIAL NOTE FOR BOY SCOUTS - THE TEN DOLLAR REGISTRATION FEE IS RETURNED BACK TO ANY NON-AMATEUR BOY SCOUT (18 YEARS OLD OR YOUNGER) WHO COMPLETES THE COURSE AND GETS AN AMATEUR RADIO LICENSE.

EIGHTH DISTRICT AMATEUR RADIO CALL-SIGN ISSUES AS OF SEPTEMBER 1, 1985 (THANKS TO DIRK, KD8ZI FOR THIS INFO)

EXTRA: NN8Z ADVANCED: KE8AT GENERAL/TECH: N8GWS NOVICE: KA8YCZ

AMATEUR RADIO MIGHT BE ON TV ON A WEEKLY BASIS!!!

A NUMBER OF LOCAL HAMS ARE WORKING ON A AMATEUR RADIO PROGRAM THAT MAY BE CONSIDERED FOR WEEKLY AIRING BY A LOCAL TELEVISION STATION. THESE PROGRAMS MAY INCLUDE NOVICE THEORY SESSIONS, AS WELL AS, EXAMPLES OF AMATEUR RADIO OPERATIONS INCLUDING: PUBLIC SERVICE, FIELD-DAY, ETC.. IF YOU ARE INTERESTED IN GETTING INVOLVED WITH THESE PROGRAMS (EITHER IN FRONT OR BEHIND THE CAMERA), PLEASE CONTACT RICH JAMES (N8FIL) AT 467-0493 OR BOB BASSETT (N8FKT) AT 671-3825.

CLEVELAND CHAPTER - AMERICAN RED CROSS - DONOR DASH

ITS TIME ONCE AGAIN FOR THE ANNUAL GREATER CLEVELAND RED CROSS DOWNTOWN 2K AND 10K RUNS. AMATEUR RADIO COMMUNICATIONS THIS YEAR WILL BE NON-CLUB AFFILIATED, HOWEVER, MIKE RICHARDSON (KA8OEI) HAS ASKED THAT HAMS FROM ALL AREA CLUBS PARTICIPATE. THE EVENT WILL BE OCTOBER 5TH SATURDAY AND WILL REQUIRE VOLUNTEERS FROM 7:30 AM TO 10:30 AM. OPERATIONS WILL BE ON A SIMPLEX FREQUENCY TO BE ANNOUCED.

PLEASE CONTACT MIKE (KA8OEI) AT 221-4766, OR BOB (N8FKT) AT 671-3825 TO VOLUNTEER.

THE RUNNERS WILL BE CARRYING PLEDGES FOR BLOOD DONATIONS BADLY NEEDED BY AREA HOSPITALS SO THIS IS A VERY WORTHWHILE PUBLIC SERVICE EVENT.

CONGRATULATIONS TO JIM NESTOR (N8GJR), WHO PASSED HIS GENERAL CLASS AT THE WARREN HAMFEST AUGUST 18TH.

CONGRATULATIONS TO JIM HARTLAND (AE8X), 1ST HARMONIC (SETH BENNEDICT) 8 LBS. 2 OZS., JULY 27TH AT 7:30 AM.

NORTH COAST 75 METER NET - WEDNESDAY'S AT 8:30 P.M., 3870 KHZ.

DAVE CURRY (KB8TT) HAS STARTED THE NORTH COAST 75 METER SSB NET ON WEDNESDAY EVENINGS. DON'T FORGET TO CHECK-IN AND HELP MAKE THIS A SUCCESSFUL NET. THIS WILL ALLOW HAMS WHO ARE NOT ON TWO-METERS TO BE ABLE TO BECOME AWARE ON OUR CLUB.

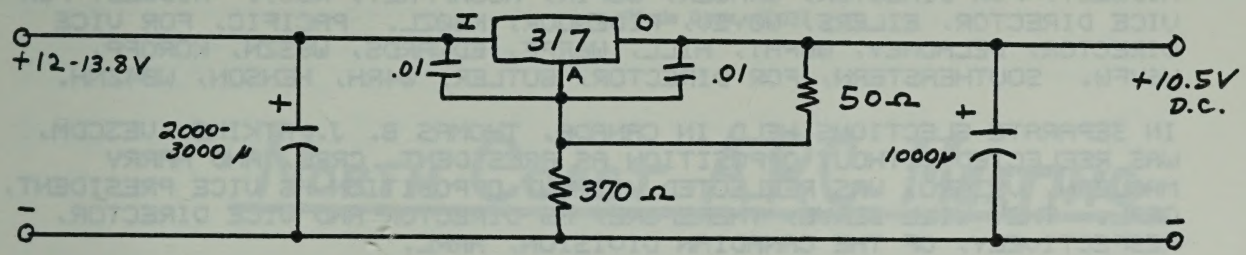
A COMMON POWER PLUG - by Steve, WB8IKO

Many years ago, a Columbus, Ohio club suggested the use of a common power plug. If I go to your house, I can plu my radio directly into your supply and visa-versa. It was not a bad idea and caught on very quickly. As to whether they are still supporting the idea, I do not know.

The plug that was used is on page 125 of the Radio Shack 1985 catalog. It is stock number 274-201. The matchin socket is 274-202 for the in-line and 274-203 for the chassis mount. Other suppliers carry a chassis mount male. They are rated for 7.5 amps but will carry more without complaining.

Perhaps this is something the club might consider. In the event of an emergency my base supply would be ready and wired for your rig.

A POWER SUPPLY CIRCUIT TO GIVE YOU 10.5 VOLTS D.C. FOR YOUR IC-2AT FROM YOUR 13.8 VOLT D.C. SUPPLY, OR YOUR CAR CIGARETTE LIGHTER IN YOUR AUTOMOBILE. AS PER A FELLOW HAM THAT GAVE IT TO ME - IT WORKS FINE BUSINESS!!



YOU WILL NEED A SLIDE OFF OF AN OLD BATTERY PACK OR ORDER A SLIDE FROM ICOM. YOU CAN PUT THIS CIRCUIT IN AN OLD PACK IF YOU WANT.

FRANK, KA8BJA

HAL WA8MYX

BALLARD HERALD - KNOWN TO US AS HAL WA8MYX PASSED AWAY JULY 29, 1985. HAL WAS BORN IN PRESTONSBURG, KY AND LIVED IN NORTH RIDGEVILLE FOR THE PAST 32 YEARS. HAL WAS AN INSTRUMENT REPAIRMAN AT THE FORD MOTOR COMPANY IN BROOK PARK FOR 23 YEARS BEFORE RETIRING IN JANUARY, 1984. HAL LIKED TO TRAVEL, HE SPENT SEVERAL OF HIS VACATIONS IN EUROPE, CENTRAL AND SOUTH AMERICA. HE LIVED FOR FOOTBALL, I THINK HE HAD TAPED EVERY PRO GAME THAT WAS ON TV FOR THE PAST 10 YEARS OR SO. HE HAD SHELVES OF CARTER VIDEO TAPES WITH SCIENTIFIC DOCUMANTARIES OF WORLD WAR HISTORY AND EARTH SCIENCES. HE LOVED GARDENING, HE ALWAYS HAD A BEAUTIFUL FLOWER GARDEN OUTSIDE AND SOME LARGE PLANTS GROWING IN HIS LIVING ROOM. HE WAS AN ACTIVE MEMBER OF THE NORTH RIDGEVILLE REPEATER ASSOCIATION AND NORTH COAST.

YOU WOULD USUALLY HEAR HAL LATE AT NIGHT, GIVING TECHNICAL HELP TO A FELLOW AMATEUR, HELPING A MOTORIST OR JUST CHATTING WITH SOME OF HIS FRIENDS ON 5.29 OR 5.23. HAL SPOKE FLUENT ELECTRONICS IN MANY AREAS. FOR SEVERAL MONTHS HE WAS TECHNICAL ADVISOR AND KEPT THE NORTH RIDGEVILLE REPEATER SERVICED.

HE HAD SOME FIRST GENERATION VIDEO RECORDING EQUIPMENT RUNNING IN HIS HOME. I SPENT MANY HOURS WATCHING SOME OF THE DOCUMENTARIES OF W.W. II, WHICH HE HAD RECOREDED. HE WAS A VERY KNOWLEDGEABLE PERSON. HE COULD TALK ABOUT ANY OF THE SCIENCES. I HAD ONLY KNOWN HAL FOR A FEW SHORT MONTHS, IN THAT TIME WE BECAME VERY GOOD FRIENDS, HE WAS ALMOST LIKE A SECOND FATHER TO ME... WE WILL ALL MISS HIM....

JIM, W8PEV

ARRL BULLETIN NR 74 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 26, 1985
TO ALL RADIO AMATEURS

THE ARRL EXECUTIVE COMMITTEE MET AUGUST 24, 1985, TO EXAMINE NOMINATING PETITIONS FILED BY MEMBERS IN SEVEN DIVISIONS FOR ARRL DIRECTOR AND VICE DIRECTOR FOR TWO YEAR TERMS OF OFFICE BEGINNING JANUARY 1.

THE FOLLOWING CANDIDATES ARE UNOPPOSED AND SO WERE DECLARED ELECTED WITHOUT BALLOTING. ATLANTIC DIRECTOR HUGH TURNBULL, W3ABC, DAKOTA DIRECTOR TOD OLSON, KØTO, DELTA DIRECTOR CLYDE HURLBERT, W5CH, GREAT LAKES DIRECTOR GEORGE S. WILSON, W4OVI, PACIFIC DIRECTOR RODNEY J. STAFFORD, KB6ZV, DAKOTA VICE DIRECTOR HOWARD MARK, WØOZC, SOUTHEASTERN VICE DIRECTOR EVELYN GAUZENS, W4WVR.

BALLOTS WERE ORDERED MAILED TO FULL MEMBERS IN SIX DIVISIONS, AS FOLLOWS. ATLANTIC, FOR VICE DIRECTOR, BARDSLEY, KB3OM, MOZLEY, W2BCH. DELTA, FOR VICE DIRECTOR, OUBRE, K5DPG, SCHMIDT, W5GHP. GREAT LAKES, FOR VICE DIRECTOR, ELLIOTT, KA4JMZ, SEVERSON, AB8P. MIDWEST, FOR DIRECTOR, GRAUER, WØFIR, MCCAFFREY, KØCY. MIDWEST FOR VICE DIRECTOR, EILERS, WØYZV, RIDENOUR, KBØZL. PACIFIC, FOR VICE DIRECTOR, DELAUNEY, W6PHT, HILL, W6RFF, EDWARDS, W6SZN, KOROPP, W6YFW. SOUTHEASTERN, FOR DIRECTOR, BUTLER, W4RH, HENSON, WB4ZNH.

IN SEPARATE ELECTIONS HELD IN CANADA, THOMAS B. J. ATKINS, VE3CDM, WAS REELECTED WITHOUT OPPOSITION AS PRESIDENT, CRRL, AND HARRY MACLEAN, VE3GRO, WAS REELECTED WITHOUT OPPOSITION AS VICE PRESIDENT, CRRL. THEY WILL SERVE, THEREFORE, AS DIRECTOR AND VICE DIRECTOR, RESPECTIVELY, OF THE CANADIAN DIVISION, ARRL.

BALLOTS MUST BE RECEIVED BY NOON NOVEMBER 20, AND WILL BE COUNTED ON THE FOLLOWING DAY.

ELECTION RESULTS WILL BE ANNOUNCED BY SUBSEQUENT BULLETIN.

NORTH COAST PUBLIC SERVICE SEPT 27, 28, AND 29

NORTH COAST WILL BE PROVIDING AMATEUR RADIO COMMUNICATIONS FOR THE TRW MIDWEST INVITATIONAL HOCKEY TOURNAMENT WHICH WILL UTILIZE THE ICE SKATING RINKS AT THE NORTH OLMSTED RECREATIONAL CENTER, ROCKY RIVER CENTER, BOTH RINKS AT WINTERHURST (LAKEWOOD), AND THE FACILITY AT BROOKLYN (MEMPHIS RD).

PLEASE CONTACT RICK WELLS (K8SCI) AT 779-8999 TO VOLUNTEER YOUR SERVICES. THIS WILL BE THE FIRST TIME THAT THIS NON-PROFIT ORGANIZATION WILL BE UTILIZING AMATEUR RADIO COMMUNICATIONS.

UPCOMING HAMFEST/CONVENTIONS

SEP 21 - CLEVELAND HAMFEST BANQUET, HARLEY HOTEL, MIDDLEBURG HTS., OHIO
SEP 22 - CLEVELAND HAMFEST AND COMPUTER SHOW, CUYAHOGA COUNTY FAIR GROUNDS, BEREA, OHIO
OCT 4 THRU 6 - 1985 ARRL NATIONAL CONVENTION, LOUISVILLE, KY.
OCT 6 - SPRINGFIELD HAMFEST AND COMPUTER EXPO
OCT 13 - LIMA HAMFEST
OCT 27 - MARION HAM FIESTA
NOV 10 - FT WAYNE (IND) HAMFEST
NOV 24 - MASSILLON AUCTIONFEST

NORTH COAST FOX HUNT RESULTS

AUG 10, 1985 - WINNER WAS RON (KC8QN) / LARRY (WB8PHI) WHO FOUND RICK (K8SCI)
SEP 14, 1985 - WINNER WAS STEVE (WB8IKO) WHO FOUND FRANK (KA8BJA) WHO WAS FILLING IN FOR KC8QN/WB8PHI.

DoppleScAnt Direction Finding System

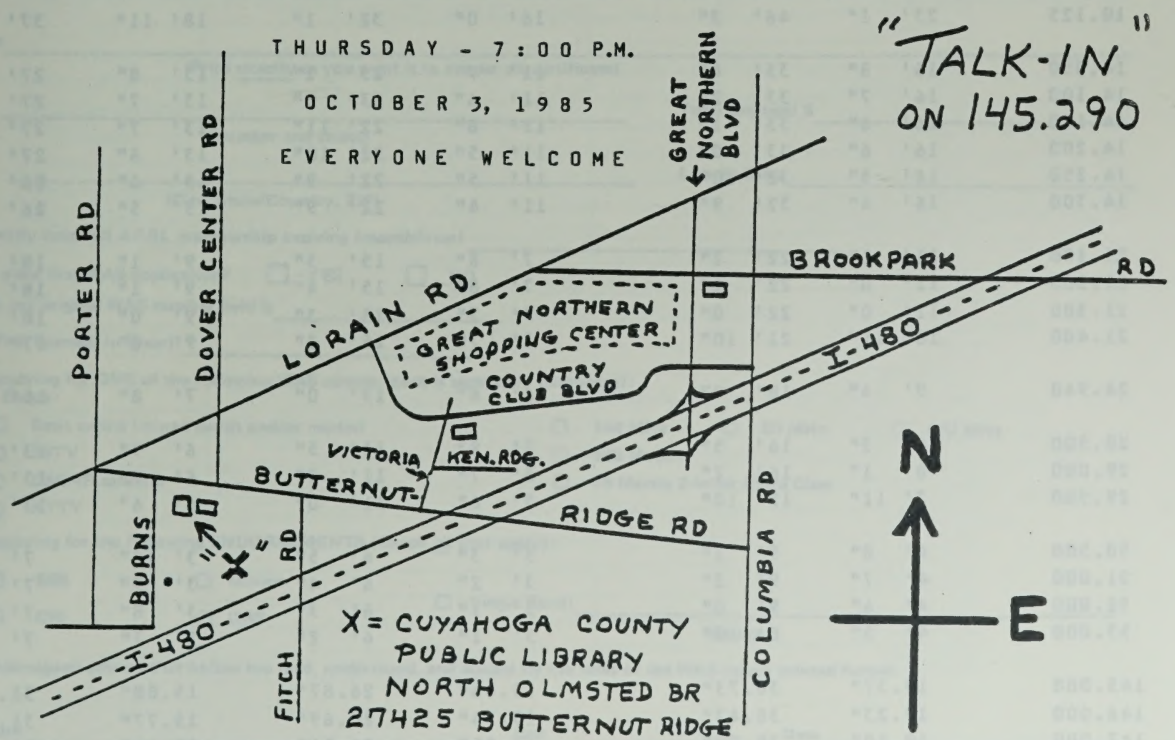
As you may know, Ron, KC8QN, and Larry, WB8PHI, using a DoppleScAnt direction finding system, were the first (and one of only two hunters) to find Rick, K8SCI, during the last NCARC fox hunt. The DoppleScAnt DF system was described in detail in the May 1978 issue of "QST."

I have acquired all of the parts for the system and have assembled a detailed parts list (with suppliers noted). The most difficult parts to find were the circuit boards. Circuit Board Specialists can supply the two circuit boards for the DoppleScAnt DF system for $15. There is also a one-time only negative charge of $20 that needs to be paid (we could spread this charge over a number of orders).

If you are interested in building the DoppleScAnt DF system and would like the circuit boards, please let me know. I can also supply the parts list. My phone number is 238-2807, or you can call me on the repeater.

73 de Dirk, KD8ZI

NORTH COAST ARC MEETING



NORTH COAST HANDY REFERENCE GUIDE FOR ANTENNA AND COAX LENGTHS (GIVEN IN FEET(')/INCHES(")

(ROUNDED TO NEAREST INCH BELOW 54 MHZ)

FREQ. IN MEGAHERTZ	ANTENNA LENGTH (468 divided by MHZ) 1/4 WAVE	ANTENNA LENGTH (468 divided by MHZ) 1/2 WAVE	COAX TRANSMISSION LINE EQUIVALENT (492 divided by MHZ times Velocity) .66 Vel. Factor 1/4 WAVE	.66 Vel. Factor 1/2 WAVE	.78 Vel. Factor 1/4 WAVE	.78 Vel. Factor 1/2 WAVE
1.850	126' 6"	253' 0"	87' 9"	175' 6"	103' 9"	207' 5"
1.900	123' 2"	246' 4"	85' 5"	170' 11"	101' 0"	202' 0"
1.950	120' 0"	240' 0"	83' 3"	166' 6"	98' 5"	196' 10"
3.550	65' 11"	131' 9"	45' 9"	91' 6"	54' 1"	108' 1"
3.600	65' 0"	130' 0"	45' 1"	90' 2"	53' 4"	106' 7"
3.650	64' 1"	128' 3"	44' 6"	89' 0"	52' 7"	105' 2"
3.700	63' 3"	126' 6"	43' 11"	87' 9"	51' 10"	103' 9"
3.750	62' 5"	124' 10"	43' 4"	86' 7"	51' 2"	102' 4"
3.800	61' 7"	123' 2"	42' 9"	85' 6"	50' 6"	101' 0"
3.850	60' 9"	121' 7"	42' 2"	84' 4"	49' 10"	99' 8"
3.900	60' 0"	120' 0"	41' 8"	83' 3"	49' 2"	98' 5"
3.950	59' 3"	118' 6"	41' 1"	82' 3"	48' 7"	97' 2"
7.050	33' 2"	66' 5"	23' 0"	46' 1"	27' 3"	54' 5"
7.100	33' 0"	65' 11"	22' 10"	45' 9"	27' 0"	54' 1"
7.150	32' 8"	65' 6"	22' 9"	45' 5"	26' 10"	53' 8"
7.200	32' 6"	65' 0"	22' 7"	45' 1"	26' 8"	53' 4"
7.250	32' 3"	64' 7"	22' 5"	44' 10"	26' 6"	52' 11"
10.125	23' 1"	46' 3"	16' 0"	32' 1"	18' 11"	37' 11"
14.050	16' 8"	33' 4"	11' 7"	23' 1"	13' 8"	27' 4"
14.100	16' 7"	33' 2"	11' 6"	23' 0"	13' 7"	27' 3"
14.150	16' 6"	33' 1"	11' 6"	22' 11"	13' 7"	27' 1"
14.200	16' 6"	33' 0"	11' 5"	22' 10"	13' 6"	27' 0"
14.250	16' 5"	32' 10"	11' 5"	22' 9"	13' 6"	26' 11"
14.300	16' 4"	32' 9"	11' 4"	22' 9"	13' 5"	26' 10"
21.100	11' 1"	22' 2"	7' 8"	15' 5"	9' 1"	18' 2"
21.200	11' 0"	22' 1"	7' 8"	15' 4"	9' 1"	18' 1"
21.300	11' 0"	22' 0"	7' 7"	15' 3"	9' 0"	18' 0"
21.400	10' 11"	21' 10"	7' 7"	15' 2"	9' 0"	17' 11"
24.940	9' 4"	18' 9"	6' 6"	13' 0"	7' 8"	15' 5"
28.500	8' 3"	16' 5"	5' 8"	11' 5"	6' 9"	13' 6"
29.000	8' 1"	16' 2"	5' 7"	11' 2"	6' 7"	13' 3"
29.500	7' 11"	15' 10"	5' 6"	11' 0"	6' 6"	13' 0"
50.500	4' 8"	9' 3"	3' 3"	6' 5"	3' 10"	7' 7"
51.000	4' 7"	9' 2"	3' 2"	6' 4"	3' 9"	7' 6"
52.000	4' 6"	9' 0"	3' 1"	6' 3"	3' 8"	7' 5"
53.000	4' 5"	8' 10"	3' 1"	6' 2"	3' 7"	7' 3"
145.000	19.37"	38.73"	13.44"	26.87"	15.88"	31.76"
146.000	19.23"	38.47"	13.34"	26.69"	15.77"	31.54"
147.000	19.10"	38.20"	13.25"	26.51"	15.66"	31.33"

ARRL WORKED ALL STATES AWARD

RULES

1. The WAS (Worked All States) award is available to all amateurs worldwide who submit proof with written confirmation of having contacted each of the 50 states of the United States of America. The WAS awards program includes 9 different and separately numbered awards as listed below. In addition, specialty ENDORSEMENT stickers are available as listed below.

2. Two-way communications must be established on amateur bands with each state. Specialty awards and endorsements must be two-way (2X) on that band and/or mode. There is no minimum signal report required. Any or all bands may be used for a general WAS. The District of Columbia may be counted for Maryland.

3. Contacts must all be made from the same location, or from locations no two of which are more than 50 miles apart, *which I affirm below.* The callsign used is immaterial provided it has been licensed to the applicant. Club station applicants, please include clearly the club name and callsign of the club station (or trustee).

4. Contacts may be made over any period of years. Contacts must be confirmed in writing, preferably in the form of QSL cards. Written confirmations must be submitted (no photocopies). Confirmations must show your call and definitely indicate that two-way communications was established. Applications for specialty awards or ENDORSEMENTS must submit confirmations that clearly confirm two-way contact on the specialty mode/band. Contacts made with Alaska must be dated January 3, 1959 or later and with Hawaii dated August 21, 1959, or after.

5. Specialty awards are available for OSCAR satellite, SSTV, RTTY, 432 MHz., 144 MHz., 50 MHz. and 160-meters. In addition, the "75-Meter 2-letter Extra Class" award is available to any Extra Class amateur who has worked all states consisting of 1x2 or 2x1 callsigns on the Extra Class portion of 75-meters. ENDORSEMENTS are available for SSB, CW, Novice, QRP, and any Single Band. The Novice endorsement is available for the applicant who has worked all states as a Novice licensee. QRP is defined as 10 watts input (or 5 watts output) of the applicant only and is affirmed by signature below.

6. Contacts made through "repeater" devices or any other power relay method cannot be used for WAS confirmation. A separate WAS is available for OSCAR contacts. All stations contacted must be "land stations." Contact with ships, anchored or otherwise, and aircraft, cannot be counted.

7. A W/VE applicant must be an ARRL member to participate in the WAS program. DX stations are exempt from this requirement.

8. All QSL cards must be accompanied by sufficient postage for their safe return (postage guideline sent on request).

9. DISQUALIFICATION. False statements on this application or submission of forged or altered cards may result in disqualification. ARRL does not attempt to determine who has altered a submitted card: therefore do not submit any marked over cards. The decision of the ARRL Awards Committee in such cases is final.

10. Place the cards in alphabetical order by state and list on the opposite side. Address all WAS applications to ARRL/WAS, 225 Main Street, Newington, Connecticut, U.S.A. 06111.

APPLICATION FORM
(PLEASE PRINT)

Name _____
(Print exactly as you want it to appear on certificate)

_____ Total enclosed $ _____
(number and street)

_____ License Class _____
(City, State/Country, ZIP)

I currently hold full ARRL membership expiring (month/year) _____

Is this your first WAS application? ☐ YES ☐ NO

If NO, my original WAS number held is _____

I was first licensed in (year): _____

I am applying for ONE of the following WAS awards (each is separately numbered):
Please Check:

☐ Basic award (mixed bands and/or modes) ☐ 144 MHz ☐ 50 MHz ☐ 432 MHz
☐ SSTV ☐ 160 Meters
☐ OSCAR satellite ☐ 75 Meters 2-letter Extra Class
☐ RTTY

I am applying for the following ENDORSEMENTS (Check all that apply):

☐ SSB ☐ Novice
☐ CW ☐ QRP ☐ Single Band: _____ Meters

The undersigned affirms that he/she has read, understood, and abided by the rules of the WAS award printed herein.

Signature _____ Call _____ Date _____

(applicant's call) (list any ex-calls shown on QSL cards)

	Call	Date	Band	Mode	
Alabama					
Alaska					
Arizona					
Arkansas					
California					
Colorado					
Connecticut					
Delaware					
Florida					
Georgia					
Hawaii					
Idaho					
Illinois					
Indiana					
Iowa					
Kansas					
Kentucky					
Louisiana					
Maine					
Maryland (D. C.)					
Massachusetts					
Michigan					
Minnesota					
Mississippi					
Missouri					
Montana					
Nebraska					
Nevada					
New Hampshire					
New Jersey					
New Mexico					
New York					
North Carolina					
North Dakota					
Ohio					
Oklahoma					
Oregon					
Pennsylvania					
Rhode Island					
South Carolina					
South Dakota					
Tennessee					
Texas					
Utah					
Vermont					
Virginia					
Washington					
West Virginia					
Wisconsin					
Wyoming					

THE INTERNATIONAL AMATEUR RADIO UNION

SINCE 1925 — THE FEDERATION OF NATIONAL AMATEUR RADIO SOCIETIES
REPRESENTING THE INTERESTS OF TWO-WAY AMATEUR RADIO COMMUNICATION

WORKED ALL CONTINENTS

In recognition of international two-way amateur radio communication, the Worked-All-Continents certificate is available to all amateur radio stations of the world from the International Amateur Radio Union.

Qualification for the award is based on an examination by the IARU of QSL cards from amateurs in each of the six continental areas defined by the IARU Rules and shown on the ARRL world map. All QSL cards (no photo-copies) must show (1) contacts made from one station, in term of callsign (this rule is waived in the case of amateurs with an attendant license upgrade), in one location (an area or metropolis not exceeding 40 kilometers or 25 miles in diameter) and (2) mode and/or band for any endorsement applied for.

All contacts for a 5-band certificate or a 6-band endorsement sticker must be made on or after January 1, 1974. All contacts for a QRP endorsement sticker must be made on or after January 1, 1985 while running a maximum power of 5 watts output or 10 watts input.

The following information should be helpful in determining the continental area of a station located adjacent to a continental boundary. North America includes Greenland (OX) and Panama (HP). South America includes Trinidad & Tobago (9Y), Aruba, Curacao & Bonaire (PJ2-4) and Easter Island (CEØ). Oceania includes Minami Tori-shima (JD1), Philippines (DU), East Malaysia (9M6-8) and Indonesia (YB). Asia includes Ogasawara Islands (JD1), Maldives (8Q), Socotra Island (7O), Abu Ail Islands (J2/A), Cyprus (5B,ZC4) and Ankara (TA2). Europe includes the 4th & 6th call areas of RSFSR (UA4-6), Istanbul (TA1), all Italian islands (I) and Azores (CT2). Africa includes Ceuta & Melilla (EA9), Madeira (CT3), Gan Island (VS9M), French Austral Territory (FB8) and Heard Island (VKØ).

After verification, the cards will be returned and the award sent soon afterward. There is no application fee. However, sufficient return postage for the cards, in the form of a self-addressed stamped envelope, is required. If you wish to have your cards returned by registered or certified mail, please check with your post office on current fee and send sufficient remittance.

INTERNATIONAL SECRETARIAT:
P.O. BOX AAA, NEWINGTON, CONNECTICUT 06111, U.S.A. TELEPHONE: 203-666-1541 TELEX: 643958 AMRAD NEWI

WAC AWARD APPLICATION

From:

Name _____ Callsign _____

Mailing Address _____

City _____ State/Prov _____ ZC/PC _____

This application is for:

- ☐ Basic certificate (CW or mixed-mode)
- ☐ SSB certificate
- ☐ SSTV certificate
- ☐ RTTY certificate
- ☐ FAX certificate
- ☐ SATELLITE certificate
- ☐ 5-band certificate
- ☐ 6-band sticker . My 5-band certificate is dated _____
- ☐ QRP sticker
- ☐ 1.8-MHz sticker
- ☐ 3.5-MHz sticker
- ☐ 50-MHz sticker
- ☐ 144-MHz sticker (for EME)
- ☐ 430-MHz sticker (for EME)

Enclosed are QSL cards from the following stations:
(Enter band(s) and callsigns)

	MHz	MHz	MHz	MHz	MHz
N. America					
S. America					
Oceania					
Asia					
Europe					
Africa					

The undersigned has abided by all rules set forth for this award.
My ARRL/CRRL membership expires _____ .

Signature _____ Callsign _____

Date _____

Only amateurs from the United States, Canada and countries without IARU representation should use this form. All other applicants must apply through their country's member-society in the IARU. US and Canadian amateurs MUST have current ARRL/CRRL membership.

THE ARRL OUTGOING QSL BUREAU

One of the greatest bargains of League membership is being able to use the ARRL Outgoing QSL Bureau to conveniently send your DX QSL cards overseas to foreign QSL bureaus. Your ticket for using this service is your QST address label and just $1 per pound. You can't even get a deal like that at your local warehouse supermarket! And the potential savings over the substantial cost of individual QSLing is equal to many times the price of your annual dues. Your cards are sorted promptly by the Outgoing Bureau staff, and cards are on their way overseas usually within a week of arrival at ARRL Hq. More than four million cards are handled by the Bureau each year!

QSL cards are shipped to QSL bureaus throughout the world, which are typically maintained by the national Amateur Radio Society of each county. While no cards are sent to individuals or individual QSL managers, keep in mind that what you might lose in speed is more than made up in the convenience and savings of not having to address and mail QSL cards separately. (In the case of DXpeditions and/or active DX stations that use U.S. QSL managers, a better approach is to QSL directly to the QSL manager. The various DX newsletters, the W6GO QSL manager directory, and other publications, are good sources of up-to-date QSL manager information.)

As postage costs become increasingly prohibitive, don't go broke before you're even halfway towards making DXCC. There's a better and cheaper way -- "QSL VIA BURO" through the ARRL outgoing QSL Bureau!

How To Use The ARRL Outgoing QSL Service

1) Presort your DX QSLs alphabetically by call-sign prefix (AP, C6, CE, DL, F, G, JA, LU, PY, 5N, 9Y and so on).
2) Enclose the address label from your current copy of QST. The label shows that you are a current ARRL member.
3) Enclose payment of $1 per each pound (or less) of cards -- approximately 155 cards weigh one pound. In other words, $1 is the minimum charge whether you send 1 card or 155 cards. Please pay by check (or money order) and write your callsign on the check. Do not send cash.
4) Include only the cards, address label and check in the package. Wrap the package securely and address it to the ARRL Outgoing QSL Service, 225 Main Street, Newington CT 06111.
5) Family members may also use the service by enclosing their QSLs with those of the primary member. Include the appropriate fee with each individual's cards and indicate "family membership."
6) Blind members who do not receive QST need only include the appropriate fee along with a note indicating the cards are from a blind member.

7) ARRL affiliated-club stations may use the service when submitting club QSLs by indicating the club name. Club secretaries should check affiliation papers to ensure that affiliation is current. In addition to sending club station QSLs through this service, affiliated clubs may also "pool" their members' individual QSL cards to effect an even greater savings. Each club member using this service must also be a League member. Cards should be sorted "en masse" by prefix, and a QST label enclosed for each ARRL member sending cards.

Recommended QSL-Card Dimensions

The efficient operation of the worldwide system of QSL bureau requires that cards be easy to handle and sort. Cards of unusual dimensions, either much larger or much smaller than normal, slow the work of the bureaus, most of which is done by unpaid volunteers. A review of the cards received by the ARRL Bureau indicates that most fall in the following range: Height = 2-3/4 to 4-1/4 in. (70 to 110 mm), Width = 4-3/4 to 6-1/4 in. (120 to 160 mm). Cards in this range can be easily sorted, stacked and packaged. Cards outside this range create problems; in particular, the larger cards often cannot be handled without folding or otherwise damaging them. In the interest of efficient operation of the worldwide QSL bureau system, it is recommended that cards entering the system be limited to the range of dimensions given.

Countries Not Served By The Outgoing QSL Bureau

Approximately 270 DXCC countries are served by the ARRL Outgoing QSL Bureau, as detailed in the ARRL DXCC Countries List. This includes nearly every active country. As noted previously, cards are forwarded from the ARRL Outgoing Bureau to a counterpart bureau in each of these countries. In some cases, there is no bureau in a particular country and cards therefore cannot be forwarded. For this reason, the ARRL Outgoing Bureau cannot forward cards to the following countries:

A5	Bhutan
A6	United Arab Emirates
A7	Qatar
BV	Taiwan
C9	Mozambique
D6	Comoros
ET	Ethiopia
HZ	Saudi Arabia
J5	Guinea-Bissau
KC4	U.S. bases in Antarctica
KC6	Belau
KC6	Micronesia
KH1	Baker and Howland Is.
KH3	Johnston I.
KH5	Palmyra and Jarvis Is.
KH7	Kure I.
KH9	Wake I.

KP1	Navassa I.
KP5	Desecheo I.
P5	North Korea
T2	Tuvalu
T3	Kiribati
T5	Somalia
TJ	Cameroon
TL	Central African Republic
TN	Congo
TT	Chad
TY	Benin
TZ	Mali
V4	St. Christopher and Nevis
VP2E	Anguilla
VR6	Pitcairn Island
XT	Burkina Faso
XU	Kampuchea
XW	Laos
XX9	Macao
XZ	Burma
YA	Afghanistan
ZA	Albania
ZD7	St. Helena
ZD9	Tristan da Cunha
ZK2	Niue
ZK3	Tokelau
3C	Equatorial Guinea
3V	Tunisia
3W	Vietnam
3X	Guinea
4W	North Yemen
5A	Libya
5H	Tanzania
5R	Madagascar
5U	Niger
5X	Uganda
70	South Yemen
7Q	Malawi
8Q	Maldives
9G	Ghana
9N	Nepal
9U	Burundi

Note: The ARRL QSL Service should not be used to exchange QSL cards within the 48 contiguous states.

SEPTEMBER 1, 1985

NORTH COAST AMATEUR RADIO CLUB - MINI ROSTER

CALL	NAME	CALL	NAME	CALL	NAME
KB8-A	DAN	N8-FDY	TOM	W8-PEV	JIM
N9-AGC	GREG	N8-FEG	PETE	K8-PPZ	TOM
WD8-AJF	DAN	N8-FGR	WAYNE	WD8-QAC	AL
N8-API	GEORGE	N8-FKS	DON	K8-QNK	DICK
K8-ATQ	ROL	N8-FKT	BOB	KD8-QY	GEORGE
N8-ATV	JERRY	KA8-FOE	PAULINE	K8-RBV	BOB
K8-AZ	TOM	N8-FQQ	TOM	WB8-RGK	TIM
W1-BBW	SHELLY	N8-GJR	JIM	K8-RSH	CHUCK
KA8-BJA	FRANK	W8-GNB	EDDIE	WD8-RZG	DON
W1-BKZ	PETE	N8-GNK	NANCY	K8-RZP	JOHN
N8-BO	CHARLIE	N8-GNL	JOHN	K8-SCI	RICK
KA8-BPU	RAY	W3-IGI	BILL	WD8-SDP	LIN
N8-BTB	STEVE	WB8-IKO	STEVE	WA8-SNI	CHARLIE
K8-BVI	ART	KA8-IMU	TONY	KA8-SNM	CHERI
N8-BYW	BUD	WD8-INK	KEN	K9-SSL	MIKE
W8-CEJ	MEL	WD8-INO	STEVE	K8-TKQ	HOWARD
W8-CHA	STEVE	W8-IO	BOB	KA8-TNE	PAUL
KB8-CI	TOM	WD8-IQJ	JOHN	KA8-TQR	DENNIS
N8-CKV	PAUL	WD8-IQO	MILT	KB8-TT	DAVE
KA8-CKZ	BILL	WD8-IRG	VAN	K8-TTZ	BOB
KA8-CQY	MICHELLE	WD8-ISB	DICK	KA8-TWK	KEN
K8-DBG	DICK	N6-JAM	RON	WB8-UDA	FRED
K8-DDY	BILL	WD8-JMM	AL	WB8-UPA	RUSS
N8-DMK	RUSS	KD8-JQ	DON	K8-UHX	J D
K8-DTS	BOB	W8-KGA	LARRY	K8-UTE	BASIL
WB8-DTY	TOMMIE	WD8-KHU	MARK	KA8-VDU	AL
N8-DZO	JACK	KC8-KI	JOHN	KA8-VIC	TIM
N8-EBA	RUSS	WD8-KTC	MARIE	K8-VJG	RON
W8-EFW	PAUL	KA8-LIH	KAREN	KA8-WAR	JOE
N8-EIJ	KEN	WD8-LRZ	LARRY	KA8-WCK	ROY
KD8-EQ	DICK	K8-MDC	FRED	W8-WXR	ROGER
WA8-ERA	LEE	WD8-MHR	ERIC	W8-WYK	MAS
W8-ETC	LEN	K8-MO	JEFF	AE8-X	JIM
N8-ETP	TOM	W8-MW	MAYNARD	AK8-Y	MIKE
N8-ETQ	DAN	WA8-MYX	HAL	KA8-Y	SHIRLEY
N8-ETW	ERNIE	WB8-NAQ	BILL	KW9-Y	DON
N8-ETY	DAVE	WA8-NXT	FERD	WB8-YNX	CLYDE
N8-ETZ	MARY	WB8-NXT	NEIL	NB8-Z	LARRY
KA8-EVS	CHARLIE	WB8-OGN	JACK	KB8-ZA	JIM
KD8-EX	TOM	WD8-OMW	GLENN	KD8-ZI	DIRK
KC8-F	HEINZ	K8-OPV	GEORGE	KD8-ZK	ED
W8-FAZ	JOE	WD8-PBQ	JAY	WB8-ZQH	DAN
N8-FCX	RON				

PROPOSED BYLAW CHANGES

On the following pages is a side-by-side comparison of the proposed bylaws (to be discussed at the October 3 general membership meeting) and the existing bylaws of North Coast Amateur Radio Club. A Bylaws Committee, which included Steve WB8IKO, Rick K8SCI, Bob K8TTZ, and Dirk KD8ZI, drafted the proposed bylaws. The Board of Trustees reviewed the draft and voted to recommend to the club that the proposed bylaws be adopted.

Listed below are the substantive changes incorporated in the proposed bylaws:

1. The number of regular meetings has been increased from six to twelve per year (Article I, Section 1).

2. The definition of a quorum has been changed to six trustees and ten general members (Article I, Section 4). Currently, a quorum is three officers and 15 general members.

3. The dates of nominations and elections have been changed to November and December, respectively (Article II, Section 2). Currently they are held in April and June.

4. Trustees and officers terms will begin January 1 instead of July 1 (Article II, Section 3 and Article III, Section 3).

5. The definition of the powers of trustees has been more clearly defined (Article II, Section 4).

6. No disbursement in excess of $100 has been added as a limitation of the trustees' powers (Article II, Section 4).

7. Definition of a quorum for trustees' meetings has been added (Article II, Section 6).

8. Provision has been made for the filling of a vacant trustee position (Article II, Section 7).

9. A requirement that the treasurer be bonded has been added (Article II, Section 8).

10. Definition of the officers' duties has been expanded (Article III, Section 4)

11. Dues for family members have been changed from $6.00/year, proratable, to $1.00/year, nonproratable. (Article IV, Section 4b).

12. Actions at meetings are carried by a majority vote, instead of a two thirds (2/3) vote (Article IV, Section 5). However, changes in the bylaws still require a two thirds (2/3) vote.

13. Requirements for changing bylaws has been changed (Article V).

14. Article VII, Indemnity, has been added. This article basically states that NCARC will indemnify club members for legal expenses, etc., in a legal action, as long as the member was acting in good faith and in a manner the member reasonably believed to be in or not opposed to the best interests of the club.

If you have any comments, questions, or additions to the proposed bylaws, please contact Dirk Gastaldo, KD8ZI, at 238-2807.

Proposed Bylaws

ARTICLE I--MEETINGS

Section 1--Regular meetings

North Coast Amateur Radio Club, herein known as NCARC, shall have twelve (12) regular meetings per year, one per month, at a place and time that is chosen by the trustees.

Section 2--Special meetings

Special meetings of the members may be held at any time upon call of the president or a majority of the trustees.

Section 3--Notice of meetings

Notice of all regular meetings shall be included in the NCARC semi-monthly newsletter. Notice of any special meetings will be made during NCARC's nets.

Section 4--Quorum

Six (6) trustees plus ten (10) general members shall constitute a quorum for the transaction of business at any regular or special meeting of NCARC.

ARTICLE II--TRUSTEES

Section 1--Number of trustees

The number of trustees shall be thirteen (13), and they shall consist of the following:

1. The officers of NCARC:

   (a) President
   (b) Vice president
   (c) Secretary
   (d) Treasurer

2. Nine (9) other trustees

Existing Bylaws

ARTICLE V--MEETINGS

Section I

N.C.A.R.C. shall have six meetings per year. August, October, December, February, April, and June of each year at a place that is chosen by the membership.

ARTICLE IX--QUORUM

A quorum for all meetings shall consist of 3 officers and 15 members. A quorum must be present in order for any action to be made at a meeting.

ARTICLE VIII--TRUSTEES

Section II

The trustees of N.C.A.R.C. shall be limited to nine (9) individuals elected from the general membership through the normal election process.

Section 2--Election of trustees

All trustees are elected by the NCARC general membership. Nominations for expired trustee positions shall be at the regular meeting held in November. All individuals nominated must be present during the November regular meeting to accept the nomination, or must have a letter on file with the NCARC secretary stating their intention to accept such a nomination.

The election ballot shall be mailed to all NCARC members following the November regular meeting. The completed ballots must be returned prior to the start of the December regular meeting. The ballots shall be counted at the December regular meeting.

Section 3--Term

At the first election process, there shall be elected nine (9) trustees (in addition to the NCARC officers): three (3) for one (1) year, three (3) for two (2) years and three (3) for three (3) years. At all subsequent elections, there shall be elected three (3) trustees for three (3) year terms of office.

ARTICLE IV--ELECTIONS

Section I

All nominations for trustees and officers will occur at the April meeting.

Section II

All individuals nominated must be present during the April meeting to accept the nomination, or must have a letter on file with the club secretary as to their intention of accepting if nominated and elected.

Section III

The election ballot shall be mailed to all members in good standing with the newsletter following the April nomination meeting.

Section IV

The completed ballot shall be returned to the person appointed at the April meeting accompanied with the dues for the up coming year not less than two weeks prior to the June meeting.

Section V

At the June meeting the results of the election will be determined. The newly elected officers and trustee terms will commence effective July 1.

ARTICLE VIII--TRUSTEES

Section III

The term of office for trustees are as follows: During the first election process, there shall be elected nine (9) trustees; three (3) for one (1) year; three (3) for two (2) years; three (3) for three (3) years. At all subsequent elections, there shall be elected three (3) trustees for three (3) years.

Trustees' terms shall begin on January 1 following their election at the previous December regular meeting.

Section 4--Powers of trustees

The trustees shall have the control and management of the business, funds and property of NCARC, subject only to the action of the members in meeting assembled. It may promulgate and enforce rules governing the use of the property and privileges of NCARC by its members and appoint standing or special committees of NCARC.

No contract which exceeds $100.00 may be entered into and no disbursement in excess of $100.00 may be made without a majority vote of the general membership. The only exception shall be by a majority vote of the trustees in the case of emergency repair needs of NCARC repeater systems.

Section 5--Meetings

The trustees shall hold regular meetings within two (2) weeks prior to all regular meetings of the general membership at a place and time that is chosen by the president.

Section 6--Quorum

A majority of the whole authorized number of trustees shall be necessary to constitute a quorum for a meeting of the trustees. However, a majority of the trustees in office shall constitute a quorum for filling a vacancy in the authorized number of trustees or in the officers of NCARC.

Section 7--Vacancies

Trustees failing to attend three (3) consecutive trustees' meetings without just cause shall automatically be removed and their position declared vacant. Just

Section I

Trustees of N.C.A.R.C. are primarily responsible for monitoring the various activities of the club to insure that its own purposes described in Article II are accomplished.

Section IV

No contract which exceeds $100.00 may be entered into without a majority vote of the general membership. The only exception would be by an affirmative vote by the trustees in the case of emergency repair needs.

ARTICLE V--MEETINGS

Section II

All trustees of N.C.A.R.C. shall meet within two weeks prior to all regular meetings at the discretion of the President.

ARTICLE VIII--TRUSTEES

Section VII

Officers or Trustees failing to attend three (3) consecutive board of director meetings without just cause shall be removed from office and their office declared vacant.

cause may include, but is not limited to, illness, job, or relocation.

In the event of a declared vacant trustee position, the trustees may appoint a member from the NCARC general membership to fulfill the vacancy until the next regular election.

Section 8--Bonds

No trustee shall be required to have any bond or surety for the faithful performance of their duties with the exception of the treasurer.

Section 9--Compensation

No NCARC trustee shall be entitled to or shall receive any compensation for attendance at any meetings or any other services rendered to NCARC.

ARTICLE III--OFFICERS

Section 1--Composition

The officers of NCARC consist of a president, vice president, secretary and treasurer. All officers are also trustees.

Section 2--Election of officers

The election of officers is handled in the same manner as the election of trustees per Article II, Section 2 of these bylaws.

Section 3--Term

Officers' terms shall begin on January 1 following their election at the previous December regular meeting, and shall be for a term of one (1) year.

Section 4--Duties

The officers shall perform the following duties:

Just cause may include but is not limited to illness, job, or relocation.

Section V

No trustee shall be required to have any bond or surety for the faithfull performance of their duties.

Section VI

No trustee shall be entitled to or shall receive any compensations for attendance at any meetings or other services rendered to the club.

ARTICLE VII--OFFICERS

Section II

All officers of N.C.A.R.C. are elected by the membership.

Section III

The term of office for all officers of N.C.A.R.C. shall be one year.

Section I

N.C.A.R.C. shall have four officers:

(a) President. The president shall preside at all meetings of members and trustees, and perform generally all duties usually incident to such office, and such other and further duties as may from time to time be required by the members or trustees.

A. President - to preside at and conduct all meetings. The president also has the authority to appoint committees to act on specific tasks which may be outside the scope of normal routine business.

(b) Vice president. The vice president shall perform all the duties of the president in case of the latter's absence or disability. In case both the president and vice president are absent or unable to perform their duties, the members or trustees, as the case may be, may appoint a president pro tempore.

B. Vice President - to assist the president, and in the absence of the president to take over those duties.

(c) Secretary. The secretary shall keep an accurate record of all transactions of the members and trustees. The secretary shall give all notices required by law and all notices provided by the bylaws of NCARC. The secretary shall keep a proper secretary's book, and shall properly record therein all minutes of members' and trustees' meetings, and such other matters as shall be proper and necessary.

C. Secretary - to record in writing all business and actions taken at all meetings.

(d) Treasurer. The treasurer shall receive and safely keep all moneys, rights and choses in action belonging to NCARC, and the same shall be disbursed under the direction of and to the satisfaction of the trustees. Proper vouchers shall be taken for all such disbursements. It shall be the treasurer's duty to keep an accurate account of the finances of NCARC on the books of NCARC prepared and furnished for that purpose, and all books shall be open for inspection and examination by the trustees or any committee of the members appointed for that purpose.

D. Treasurer - to maintain an up-to-date record of the N.C.A.R.C. assets and liabilities, to receive, and deposit all monies, and to dispense any funds necessary in the normal activities of the club so directed by the trustees or actions made at meetings.

The treasurer shall render an account of the standing of NCARC at the regular meetings of the members and at such other times as the trustees may require. The treasurer shall perform all such other and further duties as may be required by the president or trustees.

ARTICLE IV--MEMBERSHIP

Section 1--Classification

There shall be two classes of members, individual and family. Both classes of members shall be eligible to hold office and entitled to vote at meetings of NCARC.

Section 2--Individual members

Individual members may include any person who is interested in the advancement of NCARC's purposes as stated in the Articles of Incorporation.

Section 3--Family members

Family members may include any person who is interested in the advancement of NCARC's purposes as stated in the Articles of Incorporation, is a relative of an individual member, and resides at the same address as the individual member.

Section 4--Membership dues

The annual membership dues of NCARC shall be:

(a) Individual members: $12.00 per year, prorated at $1.00 per month starting July 1 of each year.

(b) Family members: $1.00 per year starting July 1 of each year. Dues for family members are not proratable.

ARTICLE III--MEMBERSHIP

The General membership of the N.C.A.R.C. at any time shall include any person who may be interested in amateur radio and the advancement of same.

ARTICLE VI--VOTING

Section I

All N.C.A.R.C. members in good standing have equal voting privileges.

ARTICLE X--MEMBERSHIP DUES

The annual membership dues of N.C.A.R.C. shall be: $12.00 per year, prorated at $1.00 per month starting July 1st of each year. Family membership - each additional person at the same residence may also be a voting member of N.C.A.R.C. at the annual fee of $6.00 per year, prorated at $.50 per month starting July 1st of each year.

Section 5--Voting

A majority vote of a quorum shall rule in all actions taken at meetings, except for Article V--Amendment of Bylaws.

ARTICLE V--AMENDMENT OF BYLAWS

Bylaws may be adopted, amended or repealed by the members by a two-thirds (2/3) vote of a quorum.

Written notification of a proposed amendment to the bylaws must be mailed to all members no later than fourteen (14) days prior to the meeting at which the proposed amendment is to be acted upon.

The officers of NCARC shall ensure that copies of the proposed amendment are available for inspection.

ARTICLE VI--PARLIAMENTARY AUTHORITY

"Robert's Rule of Order, Revised" shall govern any situation at meetings not specifically covered by these bylaws.

ARTICLE VII--INDEMNITY

(a) Any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed cause of action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than a suit by or in the right of NCARC) by reason of the fact that the person is or was a trustee, officer, member, or agent of NCARC, or is or was serving at the request of NCARC as a trustee, officer, member, or agent of another corporation, partnership, joint venture, trust, or other enterprise, shall be indemnified by NCARC for expenses (including reasonable attorneys' fees), judgments, fines and amounts paid in settlement actually and

ARTICLE VI--VOTING

Section II

In all actions taken at meetings, two thirds (2/3) vote shall be cast for any action to be passed by the members present.

ARTICLE XII--AMENDMENT OF BY-LAWS

These By-laws may be amended by an affirmative vote of two thirds (2/3) of the votes cast by the membership present at a meeting. Any proposed amendments must be read at a previous meeting prior to any action.

ARTICLE XIII--PARLIAMENTARY AUTHORITY

"Robert's Rule of Order, Revised" shall govern any situation at meetings not specifically covered by these By-laws.

ARTICLE XI--LIABILITY

No member shall be liable to N.C.A.R.C. for any loss of the club's property or damage thereto unless such loss or damage is caused by their own gross negligence or willful misconduct.

reasonably incurred by the person in connection with such cause of action, suit, or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of NCARC, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit, or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of NCARC, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

(b) Any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed cause of action or suit by or in the right of NCARC to procure a judgment in its favor by reason of the fact that the person is or was a trustee, officer, member, or agent of NCARC, or is or was serving at the request of NCARC as a trustee, officer, member or agent of another corporation, partnership, joint venture, trust, or other enterprise, shall be indemnified by NCARC against expenses (including reasonable attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of NCARC. However, no indemnification shall be made in respect of any claim, issue, or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the

performance of the person's duty to NCARC unless, and only to the extent that, the court in which such action or suit was brought shall determine, upon application, that despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as such court shall deem proper.

(c) Any indemnification under sections (a) and (b) (unless otherwise ordered by a court of competent jurisdiction) shall be made by NCARC only as authorized in the specific case upon a determination that indemnification of the trustee, officer, member, or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in sections (a) and (b). Such determination shall be made (1) by the trustees by a majority vote of a quorum consisting of trustees who were not parties to such action, suit, or proceeding, or (2) if such a quorum is not obtainable, or, even if obtainable, a quorum of disinterested members so directs, by independent legal counsel in a written opinion. Notwithstanding the provisions of sections (a) and (b) of this Article, to the extent that a trustee, officer, member, or agent of NCARC has been successful on the merits, or otherwise, in defense of any action, suit or proceeding referred to in such sections, or in the defense of any claim, issue, or matter therein, the person shall, in any event, be indemnified against expenses (including reasonable attorneys' fees) actually and reasonably incurred by the person in connection therewith.

(d) Expenses incurred in defending a civil or criminal action, suit, or proceeding may be paid by NCARC before the final disposition of

such action, suit, or proceeding. Such expenses may be authorized by the trustees in a specific case only upon receipt by NCARC of an undertaking by or on behalf of the trustee, officer, member, or agent to repay any such amount unless it shall ultimately be determined that the person is entitled to be indemnified in such amount by NCARC.

(e) The indemnification provided by this Article Seven shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled by any law of the State of Ohio, bylaw, agreement, vote of members or disinterested trustees, or otherwise, both as to action taken in the person's official capacity and as to action in another capacity while holding such office and shall continue as to a person who has ceased to be a trustee, officer, member, or agent and such rights shall inure to the benefit of such person's heirs, executors, and administrators.

From Articles of Incorporation

FIRST. The name of the corporation shall be:

North Coast Amateur Radio Club

From Articles of Incorporation

THIRD. Said corporation is organized exclusively for charitable, educational, and scientific purposes, within the meaning of section 501(c)(3) of the Internal Revenue Code of 1954, including the following:

(a) To educate and increase the proficiency of its members in the science of radio communication.

ARTICLE I--NAME

The name of this club is duly set forth as the North Coast Amateur Radio Club, and shall herein be known as N.C.A.R.C. and shall be a non-profit service oriented organization with the following aims and purposes.

ARTICLE II--PURPOSE

The purpose of N.C.A.R.C. shall be:

A. To promote, install, maintain and operate an open amateur radio repeater or repeaters for the purpose of providing reliable communications between and with other amateur stations with a primary purpose of public service and specifically dedicated to emergency communications during declared periods of disaster or

(b) To provide for dissemination of information among its members concerning scientific advancement and progress in the field of radio communication.

(c) To organize and train units of licensed radio amateurs capable of maintaining radio communication as a public service, especially during periods of emergency.

(d) To encourage and sponsor experimental activities in radio communication and electronics, to the end that skills and experience gained in amateur radio will further the application of electronics to the benefit of the public at large.

See ARTICLE II, Section 8--Bonds

See ARTICLE II, Section 7--Vacancies

community need. Further, such emergency communications systems shall be provided to support civic need when called upon but not to be totally subservient to city, county, state or federal control except in the case of national emergency.

B. To promote the interest of amateur radio communications through harmonious usage by holders of valid amateur licenses issued by the Federal Communications Commission.

ARTICLE VII--OFFICERS

Section IV

No officer shall be required to have any bond or surety for the faithfull performance of their duties with the exception of the treasurer.

Section V

Officers or Trustees failing to attend three (3) consecutive board of director meetings without just cause shall be removed from office and their office declared vacant. Just cause may include but is not limited to illness, job, or relocation.

NASA
National Aeronautics and Space Administration

1985

CLEVELAND HAMFEST BANQUET
Saturday — SEPTEMBER 21st

$19.00 Harley Hotel Ballroom, 17000 Bagley Rd., Middleburg Hts., OH — just East of I-71/Bagley Rd. Interchange. North from Ohio Turnpike, South from I-480.

Presentation and Guest Speaker DICK FEAGLER (WKYC TV-3), Cocktails 6 PM, Buffet Dinner 7 PM, Prizes. Reservations, contact: Barbara Ernest (N8DAD) at [redacted]. 941-2271.

CLEVELAND HAMFEST & COMPUTER SHOW
Sunday — SEPTEMBER 22nd - 8 AM

CUYAHOGA COUNTY FAIRGROUNDS, BEREA, OHIO

Vendors: Indoor: $10 for 8', $8 add'l. 8' (includes table(s) w/2 chairs ea.).
Set up: Saturday 12-5 PM, Sunday 6 AM on, indoor security provided.
Outdoor (Flea Market): $4 ea. space, Open 6 AM, overnight parking available.

IN CASE OF RAIN, INSIDE FLEA MARKET SPACE WILL BE MADE AVAILABLE.

General Admission: 8 AM to 5 PM, $3.50 at the Gate, $3 advance, under 12 free.

For advance tickets or information, write to:
Cleveland Hamfest Assn., P.O. BOX 93077, Cleveland, OH 44101

- COMMERCIAL EXHIBITS
- SPECIAL NASA DISPLAYS
- PRIZES GIVEN ALL DAY LONG
- LARGE FENCED-IN FLEA MARKET
- PLENTY OF PARKING ON THE GROUNDS
- MAIN PRIZES AT 3 PM (NEED NOT BE PRESENT)
- SPECIAL DRAWING FROM LAST YEAR'S TICKETS (WINNER MUST BE PRESENT).
- INTERESTING SPEAKER PROGRAMS: AMSAT - the latest news on PACSAT, OSCAR 10 & Ham Radio on the Space Shuttle. PACKET RADIO - Pete Eaton WB9FLW brings exciting information on "Packet Racket", TAPR News, and the TNC 2. ARRL FORUM - League Officials of Great Lakes Division present ARRL policies. News, and Views, given by W40YI, AB8P, K8ND, and DX and more . . . .
- NON-HAM AND LADIES' activities with Mini Arts and Crafts Fair All Day!!
- FREE AFTERNOON AUCTION.
- MOBILE CHECK-IN with W8QV on 146.52 Simplex, 0600 to 1200, Prize Drawing.
- ALL LEVELS OF AMATEUR RADIO LICENSE EXAMINATIONS will be handled on a walk-in basis. Examinations will start at 9 AM. Check at the CHA Booth upon your arrival for the time schedule of each class. You must bring the original plus a copy of your current license if upgrading. COST: $4 (Check made out to ARRL/VEC). For more information, contact Dave Willemin (AI8M) 331 Courtland, Elyria, OH 44035 — Phone: 324-4574. AT THE HARLEY HOTEL

*FOR EXAMS, MUST BE THERE PRIOR TO 9 A.M. *

Featuring National Aeronautics and Space Administration and NASA Lewis Research Center Achievements

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N.C.A.R.C.
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North Coast
Amateur Radio Club
P.O. Box 30529
Cleveland, OH 44130

*** SEPT 21, 85 (SATURDAY) CLEVELAND HAMFEST BANQUET - HARLEY HOTEL, MIDDLEBURG HTS., OHIO

*** SEPT 22, 85 (SUNDAY) CLEVELAND HAMFEST & COMPUTER SHOW - CUYAHOGA COUNTY FAIR GROUNDS, BEREA, OHIO

*** SEPT 25, 85 (WEDNESDAY) NORTH COAST BOARD MEETING AT 7:00 PM AT GLENN'S (WD8OMW)

*** SEPT 27, 28, AND 29 (FRI, SAT, & SUN) NORTH COAST PUBLIC SERVICE, TRW MIDWEST INVITATIONAL HOCKEY

*** OCT 3, 85 (THURSDAY) NORTH COAST GENERAL MEETING (IMPORANT - 7:00 PM ONE-HALF HOUR EARLIER)

*** OCT 12, 85 (SATURDAY) NORTH COAST FOX HUNT, HUNTERS READY TO GO AT 7:00 PM BEHIND N.O. BR. LIBRARY.